What is claimed is:

1. A method of controlling an operation of a motor, comprising the steps of:

detecting a phase voltage value and a phase current value applied to the motor between forward and backward revolution sections of the motor;

calculating a phase resistance value based on the detected phase voltage and current values; and

controlling the operation of the motor by controlling a voltage applied to the motor in accordance with the calculated phase resistance value.

2. The method of claim 1, wherein the motor is a sensorless brushless direct current motor.

3. The method of claim 1, wherein the motor is used for a washing machine.

4. The method of claim 1, wherein the voltage applied to the motor is proportional to a size of the phase resistance value.

5. The method of claim 1, further comprising the steps of:

calculating the phase resistance value every predetermined time when the motor stops; and

controlling the voltage applied to the motor using an average value of the

calculated phase resistance values.

6. The method of claim 1, wherein the phase resistance value is calculated by dividing the phase voltage by the phase current when an operational frequency of the motor approaches '0'.

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7. A method of controlling an operation of a motor, comprising the steps of:

detecting a phase voltage value and a phase current value applied to the motor on a middle section between forward and backward revolution sections of a sensorless brushless direct current motor built inside a washing machine;

calculating a phase resistance value based on the detected phase voltage and current values; and

controlling the operation of the motor by controlling a voltage applied to the motor in accordance with the calculated phase resistance value.

8. The method of claim 7, wherein the voltage applied to the motor is proportional to a size of the phase resistance value.

9. The method of claim 7, further comprising the steps of:

calculating the phase resistance value every predetermined time when the motor stops; and

controlling the voltage applied to the motor using an average value of the calculated phase resistance values.

10. The method of claim 7, wherein the phase resistance value is calculated by dividing the phase voltage by the phase current when an operational frequency of the motor approaches '0'.

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11. An apparatus for controlling an operation of a motor, comprising:

a revolution section detect unit calculating an operational frequency of the motor based on phase voltage and current values applied to the motor and outputting a section detect signal by detecting an operational section of the motor in accordance with the calculated operational frequency;

a calculation unit receiving the phase voltage and current values in accordance with the section detect signal so as to calculate a phase resistance value;

a speed/position calculation unit calculating a rotor position of the motor by detecting the calculated phase resistance value and the phase voltage and current values and calculating a speed of the motor; and

a voltage command generator generating a voltage command to apply a voltage to the motor based on the rotor position and the speed of the motor.

12. The apparatus of claim 11, wherein the operational section is a middle section between forward and backward revolution sections of the motor.

13. The apparatus of claim 11, wherein the calculation unit calculates the phase resistance value at a middle section between forward and

backward revolution sections of the motor.

14. The apparatus of claim 11, wherein the motor is a sensorless brushless direct current motor.

15. The apparatus of claim 11, wherein the motor is used for a washing machine.

16. The apparatus of claim 11, wherein the voltage applied to the motor is proportional to a size of the phase resistance value.

17. The apparatus of claim 11, wherein the calculation unit calculates the phase resistance value every predetermined time and calculates an average value of the calculated phase resistance value.

18. The apparatus of claim 11, wherein the calculation unit calculates the phase resistance value by dividing the phase voltage by the phase current when an operational frequency of the motor approaches '0'.